PTO/SB/05 (08-03)
Approved for use through 07/31/2006. OMB 0651-0032
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to re

UTILITY **PATENT APPLICATION** TRANSMITTAL

(only for new nonprovisional applications under 37 CFR 1.53(b))

| Attorney Docket No. | mation unless it displays a valid OMB control number. 1875.4360005 |
|------------------------|--|
| First Inventor | Manolito M. Catalasan |
| Title | Coupling of Signals Between Adjacent Functional Blocks in an Integrated Circuit Chip |
| Express Mail Label No. | |

| | | | | | | | Apr Cos | 171111 151115 | Ci 110. | | | | | Į |
|----|-------------|--|--|--|--|---------|-------------|--|--|---|-------------------|----------------------------|-------------------|------------|
| | S | APPL ee MPEP chapter 6 | JCATION E | | | AL | DRI | ESS TC |) : | Mail Stop Pate Commissioner P.O. Box 1450 Alexandria V | r for Pater | nts | | |
| 2. | | Applicant clair See 37 CFR 1. Specification | | for fee processing status. otal Pages 3 | _ | 8. 1 | Nucleo | opendix) otide and applicable Compu | or Ami e, all ned ter Read Sequen | ino Acid Secessary) able Form (Coce Listing on | equence CRF) | ge table or Con | U.S. PTO 97289 | |
| | | - Descriptive title control of the c | of the Invention to Related Applica ding Fed sponsored uence listing, a tablogram listing apper ne Invention | te Invention telated Applications Fed sponsored R & D telating, a table, m listing appendix nuvention to Invention | | c. 🗆 | | | es); or ve copies | ST 031088 | | | | |
| | | - Detailed Descrip - Claim(s) - Abstract of the D | tion | , | | 9. | \boxtimes | Assignn | nent Pap | ers (cover sh | eet & do | ocument(s)) | | |
| 4. | × | Drawing(s) (3: | 5 U.S.C. 113) | [Total Sheets | 43 1 | 10. | | | | Statement assignee) | | Power of Attorne | : y | |
| 5. | Oath | or Declaration | | [Total Pages | 9 _1 | 11. | | English | Translat | tion Docume | nt <i>(if app</i> | licable) | | |
| | | Newly exe | . • | | | 12. | | | tion Disent (IDS) | closure /PTO-1449 | | Copies of IDS Citations | | |
| | b. | | a prior applica ation/divisional | • | , ,, | 13. | | Prelimir | nary Am | endment | | | | |
| | | | DELETION O | t attached delet | ing inventor(s) | 14. | | | | ceipt Postcar | | EP 503) | | |
| | | | | imed in the prior application, see 37 CFR 63(d)(2) and 1.33(b). | | | | Certifie | d Copy o | of Priority Do | ocument | (s) | | |
| 6. | \boxtimes | Application Da | ta Sheet. See 3 | 7 CFR 1.76. | | 16. | | | | equest under 3 or its equivaler | | 122 (b)(2)(B)(i). A | pplicant m | ust attach |
| l | | | | | | 17. | \boxtimes | Other: | Autho | rization unde | er 37 C.I | F.R. § 1.136(a)(3 | <u> </u> | |
| | | | | | | | \boxtimes | Other: | The na | ame of the as | signee i | s: Broadcom Co | rporation | _ |
| | in an A | CONTINUING pplication Data Continuation | | CFR 1.76: | ropriate box, and su | | | | | below and in | · | · | ent, | |
| Fo | | or application ing TINUATION OR d a part of the dis | | Examiner PPS only: The companying co | entire disclosure of t ntinuation or divisio led from the submitte | he prio | | | | | | | nder Box | .5b, is |
| be | relied u | upon when a port | ion has been inac | lvertently omitt | | | | | | - | | · | | |
| ⊢ | | - | | | 19. CORRESPO | NDE | NCE | ADDRE | ESS | | | | | |
| L | X Cu | stomer Number 2 | | | | | | | 01 | Corres | pondence | e address below | | |
| ٨ | AME | | <u> </u> | SLER, GOLDSTEIN | & FOX P.L.L.C. | | | | | | | | | |
| ┝ | DDRES | 22 | Attorneys at I | aw | | | | | | | | | | |
| ⊢ | TTY | | | | STATE | 1 | | | | ZIP COL | DE T | | | |
| ┝ | OUNTI | RY | | | TELEPHONE | + | | | | FAX | - | | | |
| _ | | | | | | | | | | | | | | |
| Λ | AME (I | Print/Type) | Donald J. Feath | prope / | | | Re | gistration | No. (Atte | orney/Agent) | 33,87 | 6 | - | |
| S | IGNAT | URE | MILLELA | U-tu | NUSTAL | | | | | | Date | 10/3/10 | 13 | |

This collection of information is required by 3 CFR 1.53(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:: Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

FEE TRANSMITTAL for FY 2004

Teffective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT

(\$)1298.00

| Complete if Known | | | | | | |
|----------------------|------------------------------|--|--|--|--|--|
| Application Number | To be assign d | | | | | |
| Filing Date | H r with on October 31, 2003 | | | | | |
| First Named Inventor | Manolito M. Catalasan | | | | | |
| Examiner Name | To be assign d | | | | | |
| Art Unit | To be assign d | | | | | |
| Attorney Docket No. | 1875.4360005 | | | | | |

| METHOD OF PAYMENT (check all that apply) | FEE CALCULATION (continued) | | | | | | | |
|--|-----------------------------|----------------------|---------------------------|-----------|--|-----------------------------|----------|--|
| Chack Conditioned Change Order Other** None | 3. AD | DITION | AL FE | ES | | | | |
| ☐ Check ☐ Credit card ☐ Money Order ☐ Other** ☐ None ** Charge any deficiencies or credit any overpayments in the fees or fee calculations of Parts 1, 2 and 3 below to Deposit Account No. 19-0036. | | | Large Entity Small Entity | | | | | |
| Deposit Account Deposit Account Number 19-0036 | | | Fee de (\$) | • | Fee Description | | Fee Pald | |
| Deposit Account Name: Sterne, Kessler, Goldstein & Fox P.L.L.C. | 1051 | 130 | 2051 | 65 | Surcharge - late filing fe | ee or oath | | |
| The Commissioner is authorized to: (check all that apply) | 1502 | 50 | 2052 | 25 | Surcharge-late provision | nal filing fee or cover | | |
| ☐ Charge fee(s) indicated below ☐ Credit any over payments | 1053 | 130 | 1053 | 130 | Non-English specification | on | | |
| Charge any additional fee(s) during the pendency of this | 1812 | 2,520 | 0 1812 | 2,520 | For filing a request for | | | |
| application | | | 1804 | 920* | Requesting publication action | of SIR prior to Examiner | | |
| Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account. | 1805 | 1,840* | 1805 | 1,840* | | of SIR after Examiner | | |
| | 1251 | 110 | 2251 | 55 | Extension for reply with | in first month | | |
| | 1252 | 420 | 2252 | 210 | Extension for reply with | in second month | | |
| FEE CALCULATION | 1253 | 950 | 2253 | 475 | Extension for reply with | in third month | | |
| I. BASIC FILING FEE | 1254 | 1,480 | 2254 | 740 | Extension for reply with | in fourth month | | |
| _arge Entity Small Entity | 1255 | 2,010 | 2255 | 1,005 | Extension for reply with | in fifth month | | |
| Fee Fee Fee Fee Fee Description Fee Paid Code (\$) Code (\$) | 1401 | 330 | 2401 | 165 | Notice of Appeal | | | |
| 1001 770 2001 385 Utility filing fee 770.00 | 1402 | 330 | 2402 | 165 | Filing a brief in support | of an appeal | | |
| 002 340 2002 170 Design filing fee | 1403 | 290 | 2403 | 145 | Request for oral hearin | g | | |
| 1003 530 2003 265 Plant filing fee | 1451 | 1,510 | 1451 | 1,510 | Petition to institute a pu | ıblic use proceeding | | |
| 1004 770 2004 385 Reissue filing fee | 1452 | 110 | 2452 | 55 | Petition to revive - una | voidable | | |
| 1105 160 2005 80 Provisional filing fee | 1453 | 1,330 | 2453 | 665 | Petition to revive - unin | tentional | | |
| SUBTOTAL (1) (\$) 770.00 | 1501 | 1,330 | 2501 | 665 | Utility issue fee (or reis | sue) | | |
| 2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE | 1502 | 480 | 2502 | 240 | Design issue fee | | | |
| Fee from Extra below Fee Paid | 1503 | 640 | 2503 | 320 | Plant issue fee | | <u> </u> | |
| Total Claims 31 - 20** = 11 X 18 = 198.00 | 1460 | 130 | 1460 | 130 | Petitions to the Commi | ssioner | ļ | |
| ndep. Claims 2 - 3** = 0 X 86 = 00.00 | | | | | | | | |
| Multiple Dependent <u>yes</u> = <u>290.00</u> | 1807 | 50 | 1807 | 50 | Processing fee under 3 | 7 CFR 1.17(q) | | |
| Large Entity _I Small Entity | 1806 | 180 | 1806 | 180 | Submission of Informat | ion Disclosure Stmt | | |
| Fee Fee Fee Fee Fee Description Code (\$) Code (\$) | 8021 | 40 | 8021 | 40 | Recording each patent property (times number | assignment per | 40.0 | |
| 1202 18 2202 9 Claims in excess of 20 | 1809 | 770 | 2809 | 385 | Filing a submission after | er final rejection (37 CFR | <u> </u> | |
| 1201 86 2201 43 Independent claims in excess of 3 | | | | | 1.129(a)) | • • • | | |
| 1203 290 2203 145 Multiple dependent claim, if not paid | 1810 | 770 | 2810 | 385 | For each additional inv (37 CFR 1.129(b)) | ention to be examined | | |
| 1204 86 2204 43 **Reissue independent claims over original patent | 1801 | 770 | 2801 | 385 | Request for Continued | Examination (RCE) | | |
| 1205 18 2205 9 **Reissue claims in excess of 20 | 1802 | 900 | 1802 | 900 | Request for expedited application | examination of a design | | |
| and over original patent | Other f | ee (spe | l cifv) | | орриосион | | L | |
| SUBTOTAL (2) (\$) <u>488.00</u> | | | | Cilia - C | on Poid | CLIDTOTAL (2) (2)40 | . 00 | |
| or number previously paid, if greater; For Reissue, see above | Redi | uced by | Basic | riing F | ee Pal0 | SUBTOTAL (3) (\$) <u>40</u> | | |
| SUBMITTED BY | | | | | | Complete (if applicable) | | |
| Name (Print/Type) Donald J. Featherstone | | ration N ney/Agei | | | 33,876 | Telephone 202-371 | -2600 | |
| MA WHAT OF | | | | | | Date 10/3/ | 107 | |

WARNING: Information on this form may become public. Credit card Information should not be included on this form. Provide credit card Information and authorization on PTO-2038.

This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-788-9199) and select option 2. #194739v1<SKGF_DC1> -1875.4360005; fee transmittal form.wpd



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Catalasan et al.

Appl. No. To be assigned

Filed: Herewith on October 31, 2003

For: (

Coupling of Signals Between Adjacent Functional Blocks in an

Integrated Circuit Chip

Confirmation No. To be assigned

Art Unit: To be assigned

Examiner: To be assigned

Atty. Docket: 1875.4360005

Authorization to Treat a Reply as Incorporating an Extension of Time under 37 C.F.R. § 1.136(a)(3)

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

The U.S. Patent and Trademark Office is hereby authorized to treat any concurrent or future reply that requires a petition for an extension of time under this paragraph for its timely submission, as incorporating a petition for extension of time for the appropriate length of time. The U.S. Patent and Trademark Office is hereby authorized to charge all required extension of time fees to our Deposit Account No. 19-0036, if such fees are not otherwise provided for in such reply.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Donald J. Featherstone Attorney for Applicants Registration No. 33,876

Date: __() [3 | [03

1100 New York Avenue, N.W. Washington, D.C. 20005-3934 (202) 371-2600 DJF/mmb SKGF_DC1:194737.1



Robert Greene Sterne Edward J. Kessler Jorge A. Goldstein David K.S. Cornwell Robert W. Es Condi Tracy-Gene G. Durkin Michele A. Cimbala Michael B. Ray Robert E. Sokohl Eric K. Steffe Eric K. Steffe Michael Q. Lee Steven R. Ludwig John M. Covert Linda E. Alcom Robert C. Millonig Lawrence B. Bugaisky Donald J. Featherstone Michael V. Messinger

Judith U. Kim Timothy J. Shea, Jr. Patrick E. Garrett Patrick E. Garrett Heidi L. Kraus Edward W. Yee Albert L. Ferro* Donald R. Banowit Peter A. Jackman Molly A. McCall Teresa U. Medler Jeffrey S. Weaver Kendrick P. Patterson Vincent L. Capuano Eldora Ellison Floyd Thomas C. Fiala Brian J. Del Buono Virgil Lee Beaston Kimberly N. Reddick

Theodore A. Wood Elizabeth J. Haanes Bruce E. Chalker Joseph S. Ostroff Frank R. Cottingham Christine M. Lhulier Christine M. Lhülier
Rae Lynn Prengaman
Jane Shershenovich*
Lawrence J. Carroll*
George S. Bardmesser
Daniel A. Klein*
Rodney G. Maze
Jason D. Eisenberg
Michael D. Specht
Andrea J. Kamage
Tracy L. Muller*
Jon E. Wright* LuAnne M. Yuricek*

John J. Figueroa Ann E. Summerfield Timothy A. Doyle Jennifer R. Mahalingappa Teresa A. Colella

Registered Patent Agents • Karen R. Markowicz Nancy J. Leith Helene C. Carlson Gaby L. Longsworth Matthew J. Dowd Aaron L. Schwartz Mary B. Tung Katrina Y. Pei Bryan L. Skelton Robert A. Schwartzman

Jeffrey S. Lundgren Victoria S. Rutherford Eric D. Hayes

Of Counsel Kenneth C. Bass III Evan R. Smith

*Admitted only in Maryland * Admitted only in Virginia •Practice Limited to Federal Agencies

October 31, 2003

WRITER'S DIRECT NUMBER: (202) 772-8629 **INTERNET ADDRESS:** DONF@SKGF.COM

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Mail Stop Patent Application

Re: U.S. Non-Provisional Utility Patent Application under 37 C.F.R. § 1.53(b)

Appl. No.: To be assigned; Filed: Herewith on October 31, 2003

Coupling of Signals Between Adjacent Functional Blocks in an **Integrated Circuit Chip**

Inventor(s): Catalasan et al. Our Ref: 1875.4360005

Sir:

The following documents are forwarded herewith for appropriate action by the U.S. Patent and Trademark Office:

- 1. PTO Fee Transmittal (Form PTO/SB/17);
- 2. Credit Card Payment Form PTO-2038;
- 3. PTO Utility Patent Application Transmittal (Form PTO/SB/05);
- 4. Authorization to Treat a Reply as Incorporating an Extension of Time under 37 C.F.R. § 1.136(a)(3);
- 5. Recordation Form Cover Sheet;
- 6. An original executed Assignment to Broadcom Corporation, recordation of which is hereby respectfully requested;

Steme, Kessler, Goldstein & Fox PLLC.: 1100 New York Avenue, NW: Washington, DC 20005: 202.371.2600 f 202.371.2540: www.skqf.com

Commissioner for Patents October 31, 2003 Page 2

7. U.S. Utility Patent Application entitled:

Coupling of Signals Between Adjacent Functional Blocks in an Integrated Circuit Chip

and naming as inventor(s): Manolito M. Catalasan

Vafa J. Rakshani Edmund H. Spittles

Tim Sippel Richard Unda

the application consisting of:

- a. An Application Data Sheet (37 C.F.R. § 1.76);
- b. A facsimile copy of an original Declaration, executed by Manolito M. Catalasan, Vafa J. Rakshani and Richard Unda;
- c. A facsimile copy of an original Declaration, executed by Edmund H. Spittles;
- d. A facsimile copy of an original Declaration, executed by Tim Sippel;
- e. A specification containing:
 - i. 30 pages of description prior to the claims;
 - ii. 4 pages of claims (31 claims, 1 independent);
 - iii. a one (1) page abstract;
- f. 43 sheets of drawings: (Figures 1, 2, 3A-3C, 4, 5A, 5B, 6, 7A-7D, 8A, 8B, 9A-9D, 10A, 10B, 11A-11D, 12A-12D, 13, 14, 15A-15D, 16, 17A-17C, 18A-18C, 19A-19C, 20A-20C, 21A-21C, 22, 23, 24A, 24B, 25, 26A-26D, 27A, 27B, 28, 29, 30A-30D, 31A-31D, 32A, 32B, 33A, 33B, 34A, 34B, 35, 36A, 36B, 37A and 37B); and
- 8. Two (2) return postcards.

It is respectfully requested that, of the two attached postcards, one be stamped with the filing date of these documents and returned to our courier, and the other, prepaid postcard, be stamped with the filing date and unofficial application number and returned as soon as possible.

Commissioner for Patents October 31, 2003 Page 3

The U.S. Patent and Trademark Office is hereby authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

Donald J. Featherstone Attorney for Applicants Registration No. 33,876

DJF/mmb SKGF_DC1:194458.1

Sterne, Kessler, Goldstein & Fox PLLC. : 1100 New York Avenue, NW : Washington, DC 20005 : 202.371.2600 f 202.371.2540 : www.skgf.com